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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,495	10/16/2003	Daisuke Kitazawa	244077US90	5366
22850	7590	05/08/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MURPHY, RHONDA L	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 05/08/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

Application No.

10/685,495

Applicant(s)

KITAZAWA ET AL.

Examiner

Rhonda Murphy

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/23/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 1, 6, 7, 9 and 12 – 14 are objected to because of the following informalities:
  3. Use of the term “configured to” makes the limitation following the term optional and does not require the steps to be performed. The term “configured to” shall be deleted in claim 1, lines 4 and 9; claim 6, line 35; claim 7, line 6, claim 9, line 19; claim 12, line 35; claim 13, line 8; claim 14, lines 17 and 22. Refer to MPEP 2111.04 and 2106 (C).
  4. In claim 12, page 41, lines 2-4, “packet attached the request value” and “packet not attached the request value” are unclear statements and appears to be missing a term.
  5. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 9, line 20, the limitation "resources for transmitting the packets to the packets" is unclear.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 – 11 and 13 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Rinne (US 2005/0185651 A1).

**Regarding claims 1, 14 and 15**, Rinne teaches a radio communication system (Fig. 3) comprising: a plurality of mobile stations (mobiles); and a base station (RNC) comprising: a packet classification unit (Fig. 6, QoS classifier 16) configured to classify packets received/transmitted from/to a plurality of mobile stations into a quantitative guarantee type packet having a request value for communication quality (page 4, paragraph 68; differing QoS classes) or a relative guarantee type packet not having the request value (page 4, paragraph 68); and a transmission order controller (packet scheduler 22 and QoS scheduler 10) configured to control a transmission order of the

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packets for every classified quantitative guarantee type packet and every classified relative guarantee type packet (page 5, paragraphs 80-82).

**Regarding claim 2**, Rinne teaches the base station of claim 1, wherein the transmission order controller gives priority to the quantitative guarantee type packet over the relative guarantee type packet, in the transmission order (page 5, paragraphs 76 and 83).

**Regarding claim 3**, Rinne teaches the base station of claim 1, wherein the transmission order controller controls the transmission order based on a quality of service class (page 4, paragraph 83; the QoS scheduler triggers the buffers in the order of QoS classification).

**Regarding claim 4**, Rinne teaches the base station of claim 1, wherein the transmission order controller controls the transmission order based on radio quality between the base station and the plurality of mobile stations (page 4, paragraph 68).

**Regarding claim 5**, Rinne teaches the base station of claim 1, wherein the transmission order controller controls a transmission order of a plurality of quantitative guarantee type packets having same request value, such that communication quality for the request value becomes same, among a plurality of mobile stations receiving/transmitting the quantitative guarantee type packets (page 6, paragraph 85).

**Regarding claim 6**, Rinne teaches the base station of claim 1, further comprising: a measurement unit (located within QoS scheduler) configured to measure communication quality for the request value (page 2, paragraph 22, further described on page 7, paragraph 106), wherein the transmission order controller compares the

request value with a measured value by the measurement unit, and controls the transmission order based on a comparison result (page 2, paragraph 22, further described on page 7, paragraph 106).

**Regarding claim 7**, Rinne teaches the base station of claim 1, further comprising: a measurement unit configured to measure communication quality for the request value, wherein the packet classification unit restrains storing the quantitative guarantee type packet in a transmission buffer for storing the packets, when a measured value by the measurement unit is more than the request value (page 9, paragraphs 130-131).

**Regarding claim 8**, Rinne teaches the base station of claim 1, wherein the transmission order controller controls the transmission order such that a number of the quantitative guarantee type packets transmitted in unit time becomes equal to a number of packets satisfying the request value (page 7, paragraph 103).

**Regarding claim 9**, Rinne teaches the base station of claim 1, further comprising: a radio resource assignment unit (located within the scheduler 22, which is a part of the radio resource management RRM – page 5, paragraph 80) configured to assign radio resources for transmitting the packets to the packets, according to the transmission order (page 6, paragraph 85).

**Regarding claim 10**, Rinne teaches the base station of claim 9, wherein the radio resource assignment unit assigns the radio resources to the quantitative guarantee type packet based on the request value (page 6, paragraph 85).

**Regarding claim 11**, Rinne teaches the base station of claim 9, wherein the radio resource assignment unit assigns remaining radio resources to the quantitative

guarantee type packet existing in a transmission buffer for storing the packets, after assigning the radio resources to the quantitative guarantee type packet and the relative guarantee type packet (page 6, paragraph 85).

**Regarding claim 13**, Rinne teaches the base station of claim 1, further comprising: a determination unit (inherently exists for classifying the QoS classes) are configured to determine a quality of service class in a core network for a packet (page 4, paragraph 68), which has been received from a mobile station and is to be transmitted to the core network, based on whether the packet is the quantitative guarantee type packet or the relative guarantee type packet (page 4, paragraph 68).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rinne (US 2005/0185651 A1).

**Regarding claim 12**, Rinne teaches the base station of claim 1, further comprising: a request value attached to a packet arrived from a core network, based on a quality of service class for the packet in the core network (page 3, paragraph 30; further described on page 6, paragraph 90), wherein the packet classification unit classifies a packet attached the request value into the quantitative guarantee type packet (page 4, paragraph 68), and classifies a packet not attached the request value into the relative guarantee type packet (page 4, paragraph 68).

Rinne fails to explicitly disclose an attaching unit to attach the request value.

However, Rinne does disclose a packet with an attached request value arrived from a core network.

In view of this, it would have been obvious to one skilled in the art to include an attaching unit for attaching the request value, in order to affix a particular request value to the packet.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

O'Neill US 2006/0109829 A1



Puuskari et al. US 2006/0126547 A1

Taneja et al. US 2003/0198204 A1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy  
Examiner  
Art Unit 2616

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